UNIT 665

LAKE PERRIS STATE RECREATION AREA

DRAFT GENERAL DEVELOPMENT PLAN (not approved)

January 1972

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LAKE PERRIS STATE RECREATION AREA

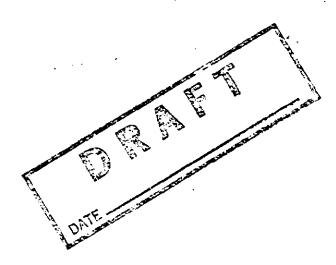
GENERAL DEVELOPMENT PLAN

Prepared By

DESIGN & CONSTRUCTION BRANCH

JANUARY 1972

Ronald Reagan Governor State of California



N. B. Livermore, Jr. Secretary for Resources

William Penn Mott, Jr.
Director
Lepartment of Parks and Recreation

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TABLE OF CONTENTS

SUMMARY

INTRODUCTION

LOCATION

ACCESS

CLASSIFICATION

DESCRIPTION

DAM AND RESERVOIR FEATURES

ACOUISITION

SITE PHYSIOGRAPHY

PLANNING HISTORY

THE PLAN FOR DEVELOPMENT

PLANNING OBJECTIVES

DESIGN ANALYSIS OF PROPOSED DEVELOPMENT

- 1. ACCESS
- 2. DEVELOPMENT OF SHORELINE GRADING
- 3. OPERATION AND ADMINISTRATION HEADQUARTER FACILITIES
- 4. VISITOR CENTER
- 5. CAMPING FACILITIES

Family Camping

Group Camping

Equestrian Camp

Organized Group Facility

Caravan Trailer Camp

Camo Store

6. PICNIC FACILITIES

Family Picnic

Group Picnic

- CABIN DEVELOPMENT
- 8. ECOLOGY AND CULTURAL CENTER
- 9. TRAIL SYSTEMS

Bicycle

Riding and Hiking

- 10. EOUESTRIAN CENTER -
- 11. BOATING FACILITIES

Boat Launching

Boat Zones and Regulations

Boat-In Facilities

Marina

Motor Launch

12. TREE PLANTING

PHASING PROGRAM

Memorandum

Date:

August 1, 1999

To:

Future Readers and Users

Subject:

Lake Perris SRA

January 1972 "Draft" General Development Plan Report

There is no known record of approval for this <u>Draft</u> General Development Plan narrative, dated January 1972 on the cover.

In February 1972, Director William Penn Mott, Jr. approved the "Lake Perris Recreation Development Plan" report, and transmitted it to Department of Water Resources Director William R. Gianelli. DWR revised, approved, and published the plan (with DPR concurrence) as *Bulletin* 117-1. This was the authoritative plan for development of new facilities.

The January 1972 Draft GDP report includes GDP drawing no. 13,105 signed by Director Mott on June 29, 1972. This made GDP drawing no. 12,908 obsolete. Unfortunately, the dates of drawing 12,908 are unknown, and no copies are available.

In the files of Central Records, there are memos and letters from early 1972 that refer to an "approved Lake Perris General Development Plan." Alas, that correspondence does not reference a specific report or numbered drawing. It appears that the early 1972 correspondence was referring to the now-obsolete drawing no. 12,908. There is another possibility, though. Drawing no. 12,908 made GDP drawing 12,375 obsolete. It, too, is undated and cannot be retrieved.

One postscript is noted. DPR drawing no. 13,095.2, sheet 2 of 18, is titled "Concession Facilities, General Development Plan." It was approved by Robert F. Uhte on April 26, 1973, with a note "Reviewed w/Dir. Mott 4/26/73."

In conclusion, the two GDP drawings, 13,105 and 13,095.2 (sheet 2 of 18), are the only approved General Development Plan documents for Lake Perris State Recreation Area. There have been no amendments or revisions since these documents were approved.

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SUMMARY

Lake Perris is located in Riverside County and will be the southernmost and last reservoir of the S.W.P.

Water will be routed to Lake Perris from Silverwood Lake, the second southern-most reservoir of the S.W.P., via a system of water carrying facilities. The waters of Lake Perris will be supplied to the L.A.M.W.D.

A total of 8,200 acres, including reservoir and recreation requirements, have been required for project purposes. At full recreation pool the lake will have 2285 surface acres.

The project construction is the responsibility of the D.W.R. The D.P.R. is exercising its authority (Davis Dolwig Act) to design, construct and operate the recreation facilities.

The Lake Perris general development plan is based on a concept of a balanced recreation package. It includes recreation facilities for picnicking, swimming, equestrian activities, boating activities, family and group camping, caravan camping, and the necessary public service and operation facilities.

Provisions have also been made for development of an Indian interpretive center, ecology and cultural center, cabins, and recreation landing strip.

The initial recreation facilities will be funded through the P&R W.E. Act in four phases. These phases will total 17.28 million dollars with approximately \$15.5 million over and above this amount required to complete the recreation potential.

Basic resources, both natural and man-made, have caused the adjustment of many recreation decisions on this project which includes elevation changes on the high and low water levels and shoreline adjustments throughout the dam borrow area.

The D.P.R. will operate the recreation area as part of the S.P.S. Lake Perris State Recreation Area will also serve as an area headquarters for this area of District Six.

INTRODUCTION

LOCATION

Lake Perris will be the southernmost reservoir of the state water project. It is in western Riverside County approximately 8 miles southeast of the City of This location is on the periphery of California's largest and most populated metropolitan district, within a two (2) hour driving distance from the Los Angeles-Long Beach, San Bernardino-Riverside-Ontario, and San Diego Metroplitan complexes.

ACCESS

Access into the project area is adequately provided by three (3) entrances. The main entrances will be the Pettit Street entrance which enters from the north, the Ramona Expressway entrance from the west and the Davis Road entrance from the east.

U. S. Highway 395 and U. S. Highway 60 provide easy access to these three entrances directly from the City of Riverside or San Diego.

Downtown Los Angeles will be less than two (2) hours from the project at normal driving speeds.

The Davis access road is a by-product of the contractors haul road which will be retained in part after completion of the dam construction.

CLASSIFICATION - STATE RECREATION AREA (operated Dept of Parks & Recreation)

DESCRIPTION

DAM AND RESERVOIR FEATURES

Perris dam is an earth fill structure 126 feet high and slightly over 2 miles long. The dam is constructed across the open end of a horseshoe-shaped ring of rocky hills that rise steeply from the relatively flat surrounding plains. The horseshoe-shaped configureation is formed by the Russell Mountains and the Bernasconi Hills.

At the high pool elevation of 1588 feet, Lake Perris has a potential surface of 2,285 acres, is approximately 1-1/2 miles long, and has a shoreline of over 8 miles. The shoreline will be noticably void of inlets and major drainages. The exception being the man-made shoreline features for recreational development purposes on the north side. The south shoreline will be retained in its natural condition and developed as a wildlife enhancement area, except for some minor modifications for boat-in facilities in the Bernasconi Pass area.

A dominant reservoir feature will be Allesandro Island which is circular in shape and rises 230 feet above the high pool elevation. The angular faces and knobs of it and the surrounding rugged hills will provide a scenic backdrop for the waters of the reservoir.

Water will be routed to Lake Perris from Silverwood Lake, which is the second southernmost reservoir of the State Water Project, to the Santa Ana Valley pipeline via the San Bernardino Tunnel and Devils Canyon Powerplant.

Lake Perris is the southernmost and last reservoir of the State Water Project and will supply water to the Los Angeles Metropolitan Water District facilities.

ACQUISITION

A total of 8,200 acres have been acquired for project purposes. The lands lie within the natural basin formed by the Russell Mountains on the north and the Bernasconi Hills on the south.

The project boundary line runs along the highest peaks of the surrounding ring of hills and extends westward past the face of the dam approximately 1/4 mile to the Ramona Expressway.

The rocky hills drop off sharply to gentle slopes around the basin. These gentle slopes will be used for recreation facility development and other related activities.

Additional private land acquisition, involving approximately 160 acres has been requested through the Department of Water Resources for recreation purposes. This acquisition is required to complete a riding and hiking trail system and protect a major Indian archeological site within the basin.

SITE PHYSIOGRAPHY

The basic resource values to be considered in the Perris Reservoir area that determined the final general development plan are as follows:

- The topography on the north side and eastern end of the reservoir provide the best land base for development.
- 2. The Wildlife Enhancement Area selected by Fish and Game is on the south side " of the reservoir where a north brush-covered mountain slope exists.
- Archaeology sites exist in the rock outcroppings at the toe of the mountainous slopes and are significant for interpretation and preservation.
- 4. Existing access continguous to the park boundary is Ramona Street Expressway at the southeast side which provides access from State Highway 395.
- 5. A county extension of Pettit Street to the northern boundary will provide access directly from the freeway State Route 60. This route is the main access to the recreation area from Los Angeles, Riverside and San Bernardino areas.
- 6. The contractor's haul road from the clay borrow area crosses the county road (Davis Road) on the east side of the reservoir project, and lends itself for potential access on the northeastern corner.
- 7. Shoreline grading was feasible along the land base frontage of the north shore to develop a usable beach zone and deepen the reservoir in its shallowest areas.
- 8. Allesandro Island projects out of the water surface in sufficient scale to break up the water surface and provide a destination point by water surface as well as a pivot point for boat play.

9. Weather conditions in this part of the State are conducive to a year-round recreational season with some of the finest weather occurring in the early spring.

Rainfall at the reservoir site averages about 10 inches per year normally occurring from November to March and often in heavy downpours with a great deal of runoff. January temperatures are typlified by a mean daily minimum of 38 degrees fahrenheit and a mean daily maximum of 66 degrees fahrenheit. Typical July temperatures are a mean daily minimum of 57 degrees fahrenheit and a mean daily maximum of 94 degrees fahrenheit. Extreme temperatures have been recorded as low as 19 degrees in January and as high as 118 degrees in July. There is an average of 250 frost free days per year, and temperatures below freezing do not usually occur until after the fall.

PLANNING HISTORY

The plan represented is the result of numerous preliminary planning adjustments. Basic resources, both natural and manmade, have caused the adjustment of many recreation decisions on this project.

When the Department of Parks and Recreation became involved in this project, the Department of Water Resources and the Los Angeles Metropolitan Water District's proposal with the dam construction was projected in two stages. The first stage construction recommended a 100,000 acre-foot reservoir, which filled to 1,578 foot elevation. The second stage construction called for a 500,000 acre-foot reservoir filling to 1,700 foot elevation. Future dates for this increase on reservoir capacity was placed in a vague time slot of from a few years up to 20 years. With this information, the Department of Parks and Recreation took the approach of developing a recreation plan aimed at a flood plain type of development, which included facilities that would be movable, or more or less of a temporary nature.

With closer analysis of this approach we teel that low cost, temporary facilities will require higher maintenance and it would be difficult to amortize concession-operated facilities. The analysis also pointed out that a better quality facilities was possible, if the time for increasing the reservoir capacity could be determined more specifically. The Department of Water Resoruces then indicated that a realistic timetable for increasing the reservoir capacity would not be before twenty years. The Department of Parks and Recreation, with this more definite time slot to work around, started its preliminary general development plan with development, that could be in line with those perimeters.

Planning adjustments were directed toward facilities both above and below the future inundation elevations, depending on their amortization period and the necessity for them to have a shoreline orientation. Future inundation would make it necessary for the Metropolitan Water District to pay relocation costs or remaining amortization costs at the time of inundation per their agreement. In discussions with the Department of Water Resources and the Metropolitan Water District, we pointed out to them that, once the recreation package was developed around the first stage reservoir, it would be difficult to inundate the established recreation area and the shade cover established by the twenty year old tree planting, as well as the established use pattern. It was recognized that a manmade reservoir and a landbased recreation area, such as Perris, would get progressively more valuable as a recreation resource. Present demands for recreation areas with the existing population base in a 2-hour travel zone and the potential of expansion speaks for itself.

The Metropolitan Water District decided that a new letter of understanding should be prepared and agreed upon between the Department of Water Resources, Parks and Recreation, and themselves. At this point M.W.D. came back with a proposal for a future review of the facts in 1995 to evaluate the possibility of going to alternate elevation increases. Their proposal was to either raise the elevation to 1,620 feet at that time (1995) or decide at that time for future enlargement to 1,700 foot elevation by the year 2020. We again had to reevaluate the development plan to place as many facilities as possible above the 1,620 foot contour for permanent installation. Interim or more easily located facilities were located below that line, particularly those facilities that had to be shoreline oriented. It should be pointed out that the difference between the developable land above 1,630 feet and 1,700 foot elevation is substantial, as the slope steepens quickly above the 1,700 foot elevation.

The final decision agreed upon by the Department of Water Resources and M.W.D., as well as the Department of Parks and Recreation, was to raise the dam as high as possible within the limits of the money available and the contract already underway. This stabilized the high water elevation at 1,588 feet elevation with no threat of inundation above that point in later years.

Through the contract preparation phase of the dam project, this Department requested that the Department of Water Resources study the possibility of borrowing material for the dam construction from the proposed shoreline of the reservoir, as an alternate to the proposed site in back of the dam. The shoreline borrowing option would create a very useful shoreline that would relate better to the proposed reservoir fluctuation. The dam construction contract was let with this option to the contractors to establish a cost differential for the Department of Water Resources and the Department of Parks and Recreation to negotiate a decision. The bid differential was minimal and the shoreline borrow was selected.

Lake Perris, will for the most part function as a regional park for its nearby population base. It serves the statewide demand only through the fact that it is part of a total recreation statewide program. With this in mind the day-use facilities will be the major development and should serve a family group with diversified recreational needs.

Earlier general development plans prepared have projected the possibility of extensive day-use recreation facilities. These plans recommended that the development of a wide range of day-use activities would extend the day-use hours into the evening, as well as extend the weekend season throughout the major part of the year. It would also give the family group a variety of facilities to satisfy each of their recreation preferences. This concept has been adjusted on the present general development plan within the confines of conventional state facilities.

Mass transportation systems were explored as a means to reduce automobile traffic within the recreation area. These systems turned out to be economically infeasible and inflexible due to use patterns, seasonal changes, and the difficulties involved in moving masses of people efficiently. It should be pointed out that the non-conventional facilities for the most part, with the exception of the original proposed 18-hole golf course, did not command a major land base, and would not have been a part of the State expenditure.

In early stages of planning, the Department of Parks and Recreation, in the preliminary study of the proper land base to water surface ratio for the Perris project, determined that the ideal water elevation would be approximately 1,650. This would have provided a water surface for public use in balance with the land oriented facility base. Since the stabilization of the dam, at the elevation of 1,588, it has been necessary for the Department of Water Resources and the Municipal Water District to reevaluate the operation schedule for the reservoir. They have selected a schedule that would satisfy water demand and yet allow for a recreation pool that is very useable. Drawdown is now projected down to an annual low of 1,560, whereas with the old schedule it would have fluctuated to an elevation of 1,540 on an annual operation. This has simplified operation of the water-oriented facility, such as the marina and launching area, as well as the swimming features.

In recent weeks, during the preparation of contract drawings by the Department of Water Resources, it was determined that this overburden of the dam spoil area should amount to about 18 inches of depth. As it turned out, it was much less and not enough to form the peninsulas to the extent proposed; therefore it has been necessary to readjust the shoreline shaping where the spoil material was to have formed the peninsulas.

THE PLAN FOR DEVELOPMENT PLANNING OBJECTIVES

The Perris plan is based on a concept of a balanced recreation package. It's purpose is not just to meet a particular shortage of water associated outdoor recreation, but to provide a highly diversified recreation experience for people of varying age groups and many recreation interests.

Perris Reservoir should provide the most diverse recreational experience compatible with available land, good planning and quality design. There should be a variety of experience for individuals and for groups as well as for masses. These activities should take place both day and night and encompass natural, recreational, cultural, entertainment, educational and informative experiences.

The land should be carefully studied in relation to proposed uses. Slopes, areas, limitations, drainage, vistas, geological features, archeological features, flora, fauna, and historical factors, as well as the development factors of all other agencies should be considered.

Because of the barrenness, massiveness and ruggedness of the site, the visual architectural elements must relate in a positive way to the site; accordingly, there must be architectural control of all the structures, outdoor furniture signs, etc. for the entire area.

There should be a variety of circulation sequences within the park, as well as a logical relationship of traffic created by automobile, bus, bicycle, service vehicle, boat, pedestrian and horse. It will also require coordination with operation of other public transportation systems outside the park.

In order to supplement the type of development envisioned at Perris, concession development will be required and feasibility studies will be made during the planning process. It is anticipated that a master concessioner will be needed to handle the concession developments by contracting out through subconcessions.

DESIGN ANALYSIS OF PROPOSED DEVELOPMENT (see plate 12908)

1. ACCESS

The initial road widths will all be one lane each way with a third lane at intersections for ease of turning, and for passing where desirable on slow grades. Space is provided for future widening of road widths where the need may arise.

Ramona Street access is an existing road contiguous to our property and easily developable to the north end of the dam. It will give a direct access to the Perris swim beach area and continue on through the park on the upland side of a developable land base. This alignment has been selected so that this major traffic artery will not sever the land base from the lake frontage. This major park road also provides an easy-flow scenic-type road with as few intersections as possible serving the use zone. Different types of use equipment are channeled to the proper zone on the secondary roads. Through the dam zone extensive coordination with the Water Resources dam construction contracts will be required.

The Pettit Street entrance will be the major access to the park because it flows from the primary freeway serving the major population base and enters the total recreation land base at its center point. Topography through this entrance is very rolling and the most scenic both entering and leaving the project. There is a view of the lake and the badlands upon entering the project and a panorama view of Moreno Valley and Mt. Baldy when exiting.

The Davis Access has been readjusted from earlier planning to take advantage of a contractor's haul road. This route is now feasible since the higher dam concept is rejected, which would have required a saddle dam in that location. The county road serving this access point is presently a low-speed gravel road which is proposed for up-grading several years in the future. This access point comes from the least populated side of the project and is the road lowest in priority on the development schedule for construction.

2. DEVELOPMENT OF THE SHORELINE GRADING

When the decision was made to use the alternate bid as a tool to estimate the cost of borrowing and spoiling along the recreation shoreline, it was necessary for this Department to evaluate the location and type of use that this development could best satisfy. With minimum grading the existing grade of the shoreline zone in the Perris Beach area was adjustable to a maximum 8 percent beach. The location of the marina and launching facilities needed to be close together because of the public service the marina can provide for those using the launching ramp (gas, tackle, etc.) It is desirable to locate the marina and launching as far easterly on the shoreline as grade adjustments and fluctuations of the water surface would allow to serve both the central portion of the total lake surface, as well as the major land base and still have close access to the Pettit Street entrance which is one of the major entrance roads.

The location of Moreno Palm Beach grading was selected and designed to complement the widening land base that still had an orientation to the water surface. Relationship to Allesandro Island gives it a different visual scale than the open expanse of water adjacent to the Perris beach zone.

A point of major discussion within the Department and through the design process has been the undesirability of boat launching access via the Berisconi Pass on the south side of the reservoir. From the standpoint of access, we felt it was

necessary to limit the points of boat launching due to the problem of control. This will be discussed in more detail in the analysis of boating capacity and zoning control. Besides control, it was necessary to analyze on which side of the lake the recreation user is best served. It should be oriented to the major use zone and the family-oriented recreation development where various members of the family group could disperse to their individual perference. This side of the reservoir also makes it accessible from both major entrance points.

The Berisconi Pass area was also looked at from the standpoint of the land base relative to becoming a boat access point and the ease of satisfying utility requirements. We have had a major concern for the protection of wildlife enhancement zone, also. If Berisconi became a fourth access point to the recreation area, it is very likely that vehicle access through the wildlife enhancement areas, along the shoreline, would soon follow. This area would also require a fourth manned contact station or a equally protective control. Another factor has also more recently entered the picture on Berisconi Pass since the raising of the dam. The riprap and drainage rock needed in the dam construction is coming out of this Pass area and it is unknown at this time just how extensive the removal zone will be.

The next area of discussion along this shoreline grading is the adjustment of the low waterline around the island at the extreme north end of the lake. A 38 foot fluctuation, proposed in earlier DWR operation schedules, made mud flats in the whole water basin northeast of the island. The grading developed at that time proposed a water channel around the island and into a small cove next to the group picnic areas, plus the grading of the remaining mud flats in such a way as to reduce the shallow water at certain time periods to eliminate botulism.

Recent Department of Water Resources operation schedules indicate that the new average low water elevation to be 1560 vs the earlier 1540. This will keep a better basin of water around the island, and with the proposed grading, make a deep enough basin to generally improve the water quality. They predict it is still possible for the water to fluctuate to an extreme low of 1540 in very dry cycles.

The basic shoreline established as listed above, sets the stage for a land base facilites behind it. It, of course, plays a major part in the justification for location and development of the facilities behind it.

3. OPERATION AND ADMINISTRATION HEADQUARTERS FACILITIES

The main operation and service facilities will be developed near the right abutment of the dam on the downstream side. It is close to one of the major access points to the park and allows for potential expension. The site is away from the direct view of the recreation core and still very accessible for service deliveries from the Ramona Expressway without access through the park. The main park headquarters will be at this site with supplemental public contact offices and emergency facilites located within the public use areas. This facility is also proposed as an area headquarters for this particular area of the State Park System of which Lake Elsinore to the southwest will be a part.

4. VISITOR CENTER

A visitor service center is proposed at the Pettit Street entrance because the site commands a view of the whole project plus the badlands as a background. This facility will have the public contact for information, general interpretation of natural history, and possible a Department of Water Resources interpretation of the State Water Project. The Department of Water Resources will participate in

the cost if they-decide to have such a facility. This facility will also house the necessary emergency-first aid equipment and staff.

5. CAMPING FACILITIES

A basic philosophy in relating camping facilities to the day use facilities is to draw off the day users first as they enter the recreation area and give the camper a more remote experience.

Family Camping

The bulk of the family camp area is proposed at the upper end of the reservoir near the wildlife enhancement area. This location was slected because it is out of the main stream of the day use activities. A campground development which will be developed initially has been proposed near the marina area for those people desiring a campsite near the boating activities and the center core of the shoreline development. This camping area will be a higher density and function more as an overnight accommodation for people primarily interested in the day use recreation.

Group Camping

A great demand for group camping facilities is developing throughout the southern part of the State. A saddle area dotted with large rock outcroppings near the wildlife area was selected for this use because of the isolated environment it provides this type of facility. This development will include comfort stations, cooking structures, campfire circles, and tent sites as well as turfed open space for games, etc.

Equestrain Camp

An equestrain camp for 50 people will be developed adjacent to the equestrian center and near the grazing pastures. Campers can quarter their horses in the grazing pastures stables of the proposed nearby equestrian center concession for extended stays.

The camp area will be developed with campsites for sleeping bags and small tents, a central eating area, barbeque pits, hitching rails, and comfort stations. Due to the extreme lack of vegetative cover in the area a tree planting program will be included.

Organized Group Facility

Group facilities for those desiring a basic lodge-type structure for sleeping and meeting will also be near the group camp in the above mentioned saddle area. This facility will serve large groups with organized programs and will include facilities for a cafeteria service.

Caravan Trailer Camp

The southern California area has experienced a shortage in caravan trailer camping areas. Sales of recretional vehicles are increasing at a fantastic rate paralleled by an increase in caravaning by many travel trailer clubs. Pressure for group use areas to satisfy the needs for these groups has been continually mounting. Caravan trailer camps generally require fewer facilities than other types of camps since most travel trailers are self contained (have

water storage tanks, sewage holding tanks, butane and battery power). A flexible design is desired with a central assembly area to satisfy different size groups from 30 to 50 trailers each or a total combination of 120. This type of facility will also be ideal for overflow camping when it is not reserved by the various groups for which it is intended.

The core of the facilities is a central heating and cooking structure and an assembly area with a fire circle for 200 people. Additional conveniences within the area include a trailer sewage disposal station and two comfort stations, one with laundry facilities.

A gravel base with fines on which the turf can be established, will be laid down to serve trailer parking thus eliminating the paved trailer pads. Trailers will be spaced far enough apart to provide each site with enough space for outdoor furniture and an awning cover. The central green space is for a common open space and game area. One hose for each 10 trailer spaces will be provided with garbage cans and slop sinks (for waste water) in convenient locations.

Camp Store

There are two suitable locations for camper supply stores in the campground areas. They are located near the main access points to the campground complexes. They will provide groceries, camper supplies, gas, laundromat, etc. and be concession operated. A feasibility study has to be conducted yet. The nearest community outside the park boundaries for such services is over 5 miles.

6. PICNIC FACILITIES

Family Picnic

The picnic units proposed behind the two beach areas will function as family picnicking for those interested in swimming or just viewing of the water surface. Extensive planting will be needed in these areas to minimize erosion and to reduce the summer heat.

Irrigated turf is an essential part of the planting both in and around the tree covered areas and at the back of the beach sand zone. This area of the beach proposed for turfing will serve as a sunbathing zone and blanket picnicking. It will be particularly beneficial for periods of high temperatures that could make the sand next to impossible to use for sunbathing and sitting.

Shade structures as well as tree plantings are an essential part of the development. Development in surrouding communities (University of California - Riverside) provide good examples of the value a shade structure has in that climate to reduce the sun and heat intensity. There is frequently a prevailing breeze that will complement this kind of sheltering.

Planting of trees and turf is proposed to also make it possible to have a density of 10 site/acre in these use zones with common use open space adjacent.

Group Picnic

Southern California has an extreme shortage of facilities for group use for both picnic and camping. Group picnic facilities have been located in this development at the upper end of the shoreline grading. This portion of the shoreline is not as water oriented to the major body of the shoreline as those for family picnicking and beach use. The group user is usually more oriented to his own group activity.

This facility is designed to accommodate large or small groups and has included with it open play meadows of irrigated turf and common assembly areas.

7. CABIN DEVELOPMENT

The cabins are proposed in steeper, rocky topography which is not desirable for camping development and is too far from the shoreline to be day use oriented. Pole construction may be a desirable type of construction to use this land to eliminate overgrading it. The sites do have visual surveillance of the lake and the backdrop of mountains.

Cabins are proposed so as to provide overnight facilities to those people who do not have camping equipment and desire a place to stay. The cabins will be comparable in function to a tent cabin. It will be necessary to consider proper designs and material to reduce the heat of the sun.

Housekeeping cabins are proposed for those desiring minimum kitchen facilities. These cabins are proposed at the very base of the mountains in the rock out-croppings which are not suitable for campsite development. All cabin developments require a feasibility study.

8. ECOLOGY AND CULTURAL CENTER

The facilities proposed here will harmonize with the natural environment. It is located next to the mountain slope with easy access from Pettit Street entrance and has a view downstream of the Lake. It will include classroom facilities and an amphitheater for adult and student programs. This should be coordinated through the school districts and local colleges to promote environmental and cultural arts programs. This facility could also serve as a training center for the Department of Parks and Recreation and local programs. Eating facilities should also be a part of this development.

9. TRAIL SYSTEMS

Bicycle

The proposed bike trail system could become an extremely popular recreation facility. Developing and encouraging its use is keeping with attitudes being expressed at the county and city government levels.

Bicycle use as a means of transportation would alleviate automobile congestion in and around the heavy use areas and allow land normally required for automobile needs to be utilized for other recreation purposes. Lake Perris has a relatively flat shoreline that lends itself favorably to cycling.

A concessions operated bicycle rental service or a park operated courtesy bike service should be considered. Courtesy bikes could be painted with distinctive colors to discourage theft. Theft of rental bikes can be controlled by contractual agreement between the rentor and the rentee.

The bicycle trail will be coordinated with the riding and hiking trail and automobile parking to provide adequate access to all developed areas throughout the recreation area. The trail should encircle the entire lake basin by crossing on the dam roadway. It is still uncertain, however, as to the potential of getting off the dam at the south end. This will not be known until further construction and borrow has taken place.

Beginning on the lakes northern shores, at the rental service, the trail will travel to and through the day use areas while taking advantage of the numerous open spaces. Spur trails providing connecting links to all developed areas as well as rest stops, comfort stations, picnic and scenic vistas will be developed. On the lakes southern shores the system could be developed as a nature appreciation trail as it passes through the wildlife enhancement area.

At present the area has no motorbike trails or other facilities designed specifically for this activity. The Lake Perris Advisory Committee has recommended and we agree that motorbike facilities could cause a noise pollution. It was decided that facilities specifically for motorbike use can best be accommodated on waste lands outside the project. One possibility under local study is on Bureau of Reclamation land.

A large number of motorbikes will enter the area with the largest amount being the honda-type bike which is used for secondary transportation once the mobile unit becomes located. Other bikes will be ridden into the areas facilities as a primary means of access. In all cased, safety problems must be considered and noise should be kept to a minimum in study of area development plans.

Riding and Hiking Trail

The Perris Lake riding and hiking trail will be developed along the highest ridges and peaks surrounding the recreation area.

Selection of this routing will avoid the higher density use areas at the lower elevations while providing trail users a riding and hiking experience through the areas most interesting archeological and geological formations. The riding and hiking trail will be approximately 22 miles in length and will circle the entire recreation area. Connecting links will provide access to all major use areas while providing a variety of hiking distances.

The system will travel to and through three high elevation nature areas and the fish and wildlife enhancement area.

Scenic vistas will be located in areas that provide a full panoramic view of the recreation area, including views outside the park boundary of surrouding valleys and badlands.

Riverside County has discussed the development of a riding and hiking trail which would connect to the Perris trail system. If this proposed program develops the Lake Perris trail system will become an even more popular recreation facility.

10. EQUESTRIAN CENTER

An equestrain center will be located near the eastern boundary of the recreation area at the base of the hills just south of the Davis Road entrance. A feasibility of the concession potential will have to be conducted but it is felt to be a very desirable element of the overall plan.

The center will provide equestrian facilities such as show arenas, practice corrals, boarding barns, camping facilities and an assembly area for those using the riding and hiking trail. Grazing pastures will be located adjacent to the center.

Boarding barns and stables will be located near the rear of the area to provide protection and privacy for those boarding their horses at the facility. This

will also be a convenient service for equestrian campers. A residence will also be considered within the facility to provide the necessary surviellance.

The equestrian center will be an intergral part of the riding and hiking trail which encircles Lake Perris and will compliment the trail system proposed by Riverside County.

11. BOATING FACILITIES

The basic planning that guided the placement of the boating facilities on Lake Perris was accomplished by the Department of Parks and Recreation prior to this responsibility being transferred to the Department of Navigation and Ocean Development. Since that transfer various elements of the plan have been adjusted to include their requirements. Location of marina and launching facilities is discussed under "2. DEVELOPMENT OF SHORELINE GRADING".

Marina

The shoreline grading has included provisions for a marina cove. The extent of development and phasing of the facility to its complete potential requires a feasibility study prior to its development as a concession.

The desirable elements for inclusion in this cove development are boat rental, slip rental, boat mooring, Department of Fish and Game and the Department of Parks and Recreation service and patrol boat storage, fuel and bait supplies and sanitary facilities.

Boat Zones and Regulations

The demands for boat access for all boat types may make it necessary to develop a zoning program for the water surface to make it safer and easier to operate as well as equally available to all users.

It is necessary to consider that the zoning will have to take into account the season as well as weekend and time-of-day use patterns. The Department of Fish and Game is proposing to heavily stock this reservoir as a warm water fishery. Certain seasons of the year and periods of the day will therefore focus on the fishing use.

Speed regulations in and around the boating facilities will be restricted to 5 mph maximum. Additional speed regulations may be required near the wildlife enhancement area depending on seasonal requirements of the Department of Fish and Game. Boating will be restricted from the swimming areas and the project inlet and outlet works.

Boat-In Facilities

This reservoir body is void of inlets and isolated areas for a boater to use as a destination point. The Bernasconi Pass and Allesandro Island have been selected for this type of development. The areas proposed have a potential of expansion of more than that shown on the plan and will be phased in to match the use patterns that develop.

The Departments of Navigation and Ocean Development and Parks and Recreation are coordinating the required number of boat-in picnicking, overnight and ski-beach developments.

The boat launching facilities are the responsibility of the Department of Navigation and Ocean Development and have been coordinated between the two departments.

Earlier studies proposed the development of six lanes of launching. Further studies into retrieval time indicated that 18 lanes would be necessary to accommodate the public safely and easily. It also makes it more flexible for additional boat capacities when the fishing season is good.

Motor Launch

A motor launch will provide access to Allesandro Island and other areas around the lake which lack automotive access. The launch should operate by a concession operator on a scheduled basis. The schedule could vary depending on the season of the year and the day of the week.

The launch will originate at the marina cove and transport passengers to Allesandro Island for picnicking, camping, and general sightseeing. From there it might proceed to the wildlife enhancement area, the Bernasconi Pass Area, and complete a circular excursion of the entire lake body, affording passengers a scenic view and/or access to Perris Lake's water oriented recreational facilities.

During off season periods the motor launch might be utilized to provide a fishing experience for elderly people, the underprivileged and handicapped persons.

12. TREE PLANTING

Because of the climate and the barrenness of the site, an extensive tree planting . program must be part of the planning at Perris. This program should begin as soon as possible and should be accomplished so it does not interfere with the planning or development of the site.

Several ideas have been considered in the tree planting program.

- 1. Planting of some specimen trees for shade instead of building ramadas. Smaller plants could be planted for future shade.
- 2. Establishment of a tree farm on the site. Trees could be grown in rows for easy maintenance and could be transplanted after grading and construction is completed. Planting of some specimen trees or provison of ramadas would still be necessary. It would be necessary to establish this farm in the early stages of construction. The economics of establishment of a farm versus local purchase of comparable materials will have to be considered.
- 3. Massive tree planting with seed or lining out stock in undeveloped areas and in parts of developed areas after construction is completed. Overplanting would be done, accepting the loss of a certain amount of plants due to natural attrition. Planting of additional materials of various sizes would also be required, as well as ramadas or specimen trees.

13. RECREATION LANDING STRIP .

The recreation landing strip is proposed in a location where it would not be in competition with the recreation land base or the recreation user. It has been reviewed and supported in concept by the Department of Aeronautics but requires further study and coordination. If it meets these requirements it will be funded through their funding program.

The Department of Parks and Recreation has established a Perris Reservoir Design Advisory Committee which is a cross section of local citizens. The objective of the committee is to assist the Director, the Departments Design staff, and District Operations in coordinating local attitudes and activities in connection with facilities, development schedules, and promotion of Lake Perris. They have approved the concept presented in this General Development Plan.

(Funding-Recreation and Fish and Wildlife Enhancement Act of 1970)

The G.D.P., see plate (2908, identifies the total recreation potential. The plan has analyzed approposed and balanced recreation package which preserves substantial open space for visual and hiking enjoyment.

Passage of the Recreation and Fish and Wildlife Enhancement Act of 1970 earmarked 17.28 million dollars for this project.

The expenditure of this bond money has been programmed over three to four budget years, dependent on the approval of funds by the Legislature and the sale of bonds.

This Department has identified areas of development, see plate 12944, to be developed with this bond money. This plan can serve the public recreation need by providing balanced recreation, keeping developed areas closely related geographically to minimize development cost, and simplifying the operation of the unit.

It was felt that the first demands by the public would be that of water access, both swimming and boating. It is logical then for the initial day-use and overnight facilities to be developed in close proximity. Feasibility studies of any facility with concession potential will have to be phased into the program as the State development takes place.

Selection of facilities for the initial development was based on what services the public needs on the initial opening season and the amount of time remaining to complete designs, contracts, and development before the reservoir fills to its low recreation pool in late 1973. This will include access, circulation, utilities for sanitation and safety, water access at one beach and boating facilities developed by the Department of Navigation and Ocean Development.

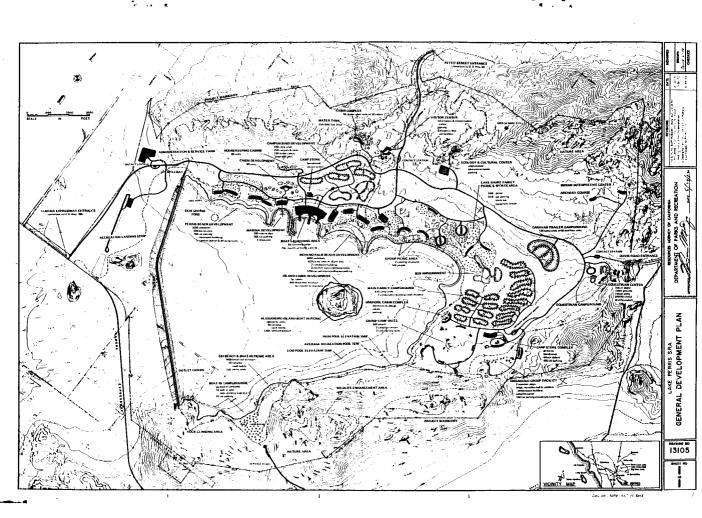
Perris Beach will be the first beach constructed to meet the initial demand for swimming. This initial swimming facility will continue to serve the public demand during the Moreno Beach development and plant establishment period which occur during the second phase construction.

Second phase funding will be used to develop Moreno Palm Beach and dayuse facilities behind it. This phase will also include group picnicking areas, initial camping, and administrative facilities. Portions of the trail system will be started in this phase and continue through each of the remaining phases. Boat-in facilities for camping and picnicking will also be started. A major planting program will also start in this phase.

The third phase will complete the camping in back of Moreno Palm Beach as well as interim group camp areas and a trailer caravan campground. The visitor center will be included in this phase along with additional interpretation of the natural and archeological resources.

The fourth phase will complete the day use development behind Perris Beach and other items requiring completion.

The remaining areas not developed by the 17.28 million dollars will require additional analysis after completion of these initial phases to determine which has the highest priority for development and the best means of funding. If these areas remain undeveloped for several years, there will undoubtedly be various field events proposed by local groups that can be accommodated on this open space.



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